

WHAT IS CLAIMED IS:

1. An apparatus for controlling an electrical power supply having:
 - a voltage input (20, 21) which can be connected to an electrical voltage source;
 - a voltage output (22, 23) which is connected via an electrical connection to the voltage input (20, 21) and can be connected to an electrical appliance;
 - a load measurement device (26) for determining an electrical measurement variable which is characteristic of an electrical voltage produced at the voltage output (22, 23);
 - a load switching device (25) for switching the electrical connection between the voltage input (20, 21) and the voltage output (22, 23) such that a standby voltage or an operating voltage is produced at the voltage output (22, 23) after the connection of the voltage input (20, 21) to a voltage source; and
 - a monitoring device (29), which is connected to the load measurement device (26) and to the load switching device (25), for electronic processing of the electrical measurement variable which is determined by means of the load measurement device (26), such that the load switching device (25) can be operated by means of the monitoring device (32) as a function of the time profile of the determined electrical measurement variable such that the production of the operating voltage at the voltage output (22, 23) is limited to a predetermined time period, and the standby voltage is produced at the voltage output (22, 23) at times which are not included in the predetermined time period.
2. The apparatus as claimed in claim 1, wherein the load measurement device (26) for determining the electrical measurement variable is an inductive measurement device.
3. The apparatus as claimed in claim 1, wherein the load measurement device (26) is designed to carry out a threshold value measurement.

4. The apparatus as claimed in claim 1, wherein the monitoring device (32) has a consumption timer device (28), which is connected to the load measurement device (26) and has a counting device, with an electronic value of the counting device being continuously adapted during the predetermined time period in which the load measurement device (26) indicates the presence of the operating voltage at the voltage output (22, 23) by means of electrical signals to the consumption timer device (28).
5. The apparatus as claimed in claim 1, wherein the monitoring device (32) has signal means for producing a switch-off signal, which can be transmitted to the load switching device (25), when the consumption timer device (28) finds that the electronic value of the counting device is equal to a maximum setting value.
6. The apparatus as claimed in claim 1, wherein the monitoring device (32) is connected to a signal transmitter (30) so that an electrical signal can be transmitted from the monitoring device (32) to the signal transmitter (30) when the electrical value of the counting device reaches a predetermined limit value.
7. The apparatus as claimed in claim 1, wherein the monitoring device (32) has a 24-hour consumption timer device (31) with a further counting device.
8. The apparatus as claimed in claim 1, distinguished by a control device (29) for controlling the consumption timer device (28) and the 24-hour consumption timer device (31).
9. The apparatus as claimed in claim 8, distinguished by input means for inputting an identification code, with the input means being connected to the control device (29).
10. The apparatus as claimed in claim 9, distinguished by a push-button device (10, 11), which is connected to the control device (29), for setting the maximum setting value, in which case the input identification code can be evaluated electronically

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in the control device (29) such that the pushbutton device (10, 11) can set the maximum setting value only if the input identification code corresponds to a predetermined identification code.

11. The apparatus as claimed in claim 8, wherein the voltage output (22, 23) is electrically connected to connecting means (6, 7, 8) for holding appliance connecting means of an electrical appliance, with the connecting means having a locking mechanism which interacts with the control device (29) such that the control device (29) and the load switching device (25) prevent the operating voltage being produced at the voltage output (22, 23) after a time at which the locking mechanism is unlocked.
12. The apparatus as claimed in claim 11, wherein the locking mechanism is a mechanical locking mechanism.
13. The apparatus as claimed in claim 5, distinguished by memory means for electronic storage of the maximum setting value.
14. The apparatus as claimed in claim 1, wherein the apparatus is in the form of a plug-on part (1) for a plug socket for a domestic supply.
15. A method for controlling a power supply, which method comprises the following method steps:

switching of an electrical connection (24) between a voltage input (20, 21) and a voltage output (22, 23) by means of a load switching device (25) such that a standby voltage or an operating voltage is produced at the voltage output (22, 23) when the voltage input (20, 21) is connected to an electrical voltage source;

- monitoring of the electrical connection (24) between a voltage input (20, 21) and a voltage output (22, 23) by means of a load measurement device (26), in order to determine an electrical measurement variable which is characteristic of a voltage produced at the voltage output (22, 23);

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and

- control of the load switching device (25) by means of a monitoring device (32) as a function of a time profile of the determined electrical measurement variable, such that the presence of the operating voltage at the voltage output (22, 23) is limited to a predetermined time period, and the standby voltage is produced at the voltage output (22, 23) at times which are not included in the predetermined time period.
16. The method as claimed in claim 15, wherein, in order to define the predetermined time period, a maximum setting value which is entered using input means is detected electronically.
 17. The method as claimed in claim 15, wherein, at a defined time before the predetermined time period is reached, an electrical signal is transmitted from the monitoring device (32) to a signal transmitter (30), and, as a reaction to the electrical signal, the signal transmitter (30) produces a visual and/or an audible signal.
 18. The method as claimed in claim 15, wherein an electronic value of a counting device is increased continuously during the predetermined time period, with the counting device being included in a consumption timer device (28), which is connected to the load measurement device (26), for the monitoring device (32).

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